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Dart Aerospace Ltd.
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Tel (613) 632-5200
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D350-591-214
Job Sheet 195596



Avic

Part No: D350-591-214

Job Qty: 10 pcs

Part Name: Heli-Access-Step™ RH - High Gear, Short Step, Aerazur Float Compatible



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 5/27/19

Job Tracking No:

Due Date: 8/9/19

Created By: Marie Lajeunesse

Type: SOLD

Description:

order 16671

Note: DWG REV H IPP Rev:B 05.10.14 Modified step 10 KJ/EC IPP Rev:C 06-06-19 Added D2732-030 AS PER
DSI9294 JLM IPP Rev:C 06-06-27 Revised as per DSI9340 JLM IPP Rev:D 10.11.15 update qty on AN4-11A
DD verf:EC IPP REV:E 14.12.17 ADD DSI9712-011 DD VERF:JLM IPP REV:F 16.03.16 IIN REV:H DD
VERF:JLM

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Packaging 1 - Pick Kit	10 pcs	8/9/19		0.00	0.00	Packaging 1 - 1		
							Packaging 1 - 2		
							Packaging 1 - 3		
							Packaging 1 - 4		
							Packaging 1 - 5		
							Packaging 1 - 6		
							Packaging 1 - 7		
							Packaging 1 - 8		
							Packaging 1 - 9		
							Packaging 1 - 10		
							Packaging 1 - 11		
							Packaging 1 - 12		
							Packaging 1 - 13		
							Packaging 1 - 14		
							Packaging 1 - 15		
							Packaging 1 - 16		
							Packaging 1 - 17		
							Packaging 1 - 18		
							Packaging 1 - 19		
							Packaging 1 - 20		
							Packaging 1 - 21		
							Packaging 1 - 22		
							Packaging 1 - 23		
							Packaging 1 - 24		
							Packaging 1 - 25		
							Packaging 1 - 26		
							Packaging 1 - 27		
							Packaging 1 - 28		
							Packaging 1 - 29		

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CANADA
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Container No: S205010

Part: D350-591-214

Job No: 195596

Serial No/B: tch: S205010

Revision:

Inspector:

Exp Date:

Instructions: T: STC SH92 - 6 Issue 10 Def FA: STC SH967NE 04/12/21, BRAZIL 19

				Packaging 1 - 30	
				Packaging 1 - 31	
				Packaging 1 - 32	
				Packaging 1 - 33	
				Packaging 1 - 34	
				Packaging 1 - 35	
				Packaging 1 - 36	
270	Packaging 1-1 - Pick Kit - B4B	10 pcs	8/9/19	0.00 0.00	Packaging 1 - 1 - B4B
					Packaging 1 - 2 - B4B
					Packaging 1 - 3 - B4B
					Packaging 1 - 4 - B4B
					Packaging 1 - 5 - B4B
					Packaging 1 - 6 - B4B
					Packaging 1 - 7 - B4B
					Packaging 1 - 8 - B4B
					Packaging 1 - 9 - B4B
					Packaging 1 - 10 - B4B
					Packaging 1 - 11 - B4B
					Packaging 1 - 12 - B4B
					Packaging 1 - 13 - B4B
					Packaging 1 - 14 - B4B
					Packaging 1 - 15 - B4B
					Packaging 1 - 16 - B4B
					Packaging 1 - 17 - B4B
					Packaging 1 - 18 - B4B
					Packaging 1 - 19 - B4B
					Packaging 1 - 20 - B4B
					Packaging 1 - 21 - B4B
					Packaging 1 - 22 - B4B
					Packaging 1 - 23 - B4B
					Packaging 1 - 24 - B4B
					Packaging 1 - 25 - B4B
					Packaging 1 - 26 - B4B
					Packaging 1 - 27 - B4B
					Packaging 1 - 28 - B4B
					Packaging 1 - 29 - B4B
					Packaging 1 - 30 - B4B
					Packaging 1 - 31 - B4B
					Packaging 1 - 32 - B4B
					Packaging 1 - 33 - B4B
					Packaging 1 - 34 - B4B
					Packaging 1 - 35 - B4B
					Packaging 1 - 36 - B4B
280	QC 4	10 pcs	8/9/19	0.00 0.00	QC 4 - 28
					QC 4 - 58
					QC 4 - 69
					QC 4 - 9
					QC 4 - 46
					QC 4 - 68
					QC 4 - 72
					QC 4 - 74
290	Packaging 3-1 - Stock - B4B	10 pcs	8/9/19	0.00 0.00	Packaging 3 - 1 - B4B
					Packaging 3 - 2 - B4B
					Packaging 3 - 3 - B4B
					Packaging 3 - 4 - B4B
					Packaging 3 - 5 - B4B
					Packaging 3 - 6 - B4B
					Packaging 3 - 7 - B4B
					Packaging 3 - 8 - B4B

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				Packaging 3 - 9 - B4B	
				Packaging 3 - 10 - B4B	
				Packaging 3 - 11 - B4B	
				Packaging 3 - 12 - B4B	
				Packaging 3 - 13 - B4B	
				Packaging 3 - 14 - B4B	
				Packaging 3 - 15 - B4B	
				Packaging 3 - 16 - B4B	
				Packaging 3 - 17 - B4B	
				Packaging 3 - 18 - B4B	
				Packaging 3 - 19 - B4B	
				Packaging 3 - 20 - B4B	
				Packaging 3 - 21 - B4B	
				Packaging 3 - 22 - B4B	
				Packaging 3 - 23 - B4B	
				Packaging 3 - 24 - B4B	
				Packaging 3 - 25 - B4B	
				Packaging 3 - 26 - B4B	
				Packaging 3 - 27 - B4B	
				Packaging 3 - 28 - B4B	
				Packaging 3 - 29 - B4B	
				Packaging 3 - 30 - B4B	
				Packaging 3 - 31 - B4B	
				Packaging 3 - 32 - B4B	
				Packaging 3 - 33 - B4B	
				Packaging 3 - 34 - B4B	
				Packaging 3 - 35 - B4B	
				Packaging 3 - 36 - B4B	
295 DC - 1 - B4B	10 pcs	8/9/19	0.00 0.00	DC - 1 - B4B	DAS 21 AUG 14 2019
				DC - 2 - B4B	9-59
300 QC 21 - FG	10 pcs	8/9/19	0.00 0.00	QC 21 - FG - 21	DAS 21 AUG 14 2019
				QC 21 - FG - 70	9-59
				QC 21 - FG - 53	

Part Op 280 - (QC4- 100% Inspect kits for completeness)

Descriptions: 290 - Identify and pack for shipping as per PPP D350-591-214 Location:FG039

295 - Photocopy bluefile and type labels as per PPP D350-591-214 CHG005

300 - QC21- Final Inspection - Work Order Release

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
AN3-35A	Bolt	20 Ea (2 ea)	90-Packaging 1 - Pick Kit	5153557
AN4-15A	Bolt	40 Ea (4 ea)	90-Packaging 1 - Pick Kit	513443612 / 517340658
AN5-36A	Bolt	20 Ea (2 ea)	90-Packaging 1 - Pick Kit	51938339110 / 5551781720
D2230-3	Mounting Lug	20 pcs (2 ea)	90-Packaging 1 - Pick Kit	5191064
D2618	Bushing	20 pcs (2 ea)	90-Packaging 1 - Pick Kit	5203710
D2732-030	Rubber Cushion - 3"	40 pcs (4 ea)	90-Packaging 1 - Pick Kit	519857078 / 518413612
D3235-1	Mounting Lug	20 pcs (2 ea)	90-Packaging 1 - Pick Kit	518339174
D3338-1	Mounting Lug	10 pcs (1 ea)	90-Packaging 1 - Pick Kit	5134808
MS21042L3	Nut	20 Ea (2 ea)	90-Packaging 1 - Pick Kit	5104283
MS21042L4	Nut	60 Ea (6 ea)	90-Packaging 1 - Pick Kit	5107628
MS21042L5	Nut	20 Ea (2 ea)	90-Packaging 1 - Pick Kit	5180182
NAS1149D0363J	Washer	40 Ea (4 ea)	90-Packaging 1 - Pick Kit	5191331
NAS1149D0463J	Washer	120 Ea (12 ea)	90-Packaging 1 - Pick Kit	5100189
NAS1149D0563J	Washer	40 Ea (4 ea)	90-Packaging 1 - Pick Kit	5134693
AN4-16A	Bolt	40 Ea (4 ea)	90-Packaging 1 - Pick Kit	5102852
D3078-042	Step Assembly, Hi Short RH	10 pcs (1 ea)	270-Packaging 1-1 - Pick Kit - B4B	5198001

Job Allocations				
Operation	Component Part	Required	Inventory	Allocated
90-Packaging 1 - Pick Kit	AN3-35A	20	458	0
	AN4-15A	40	272	0
	AN4-16A	40	545	0
	AN5-36A	20	147	0
	D2230-3	20	214	0
	D2618	20	247	0
	D2732-030	40	43	0
	D3235-1	20	116	0
	D3338-1	10	86	0
	MS21042L3	20	2,194	0
	MS21042L4	60	2,342	0
	MS21042L5	20	781	0
	NAS1149D0363J	40	1,582	0
	NAS1149D0463J	120	3,545	0
	NAS1149D0563J	40	2,970	0
270-Packaging 1-1 - Pick Kit - B4B	D3078-042	10	4	0
Part Specifications				
Specifications could not be found.				

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Entered: _____ Date: _____



WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: _____ Part No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐	DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐			
Date : _____	Sequence #: _____	QTY Affected : _____		MRB (QSI042)	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor		
			QC / QA Coordinator		
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Preservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐		FAULT CATEGORY ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread			
Other/Details:					

Qty -213	Qty -214	Qty -215	Qty -216	Qty -311	Qty -312	Part Number	Description
X						D350-591-213	Heli-Access-Step™, Short Step – High Skid, LH
	X					D350-591-214	Heli-Access-Step™, Short Step – High Skid, RH
		X				D350-591-215	Heli-Access-Step™, Short Step – Low Skid, LH
			X			D350-591-216	Heli-Access-Step™, Short Step – Low Skid, RH
				X		D350-591-311	Heli-Access-Step™, Long Step – High Skid, LH
					X	D350-591-312	Heli-Access-Step™, Long Step – High Skid, RH
1						D3078-041	STEP ASSEMBLY (HIGH-SHORT, LH)
	1					D3078-042	STEP ASSEMBLY (HIGH-SHORT, RH)
		1				D3168-041	STEP ASSEMBLY (LOW-SHORT, LH)
			1			D3168-042	STEP ASSEMBLY (LOW-SHORT, RH)
				1		D3272-041	STEP ASSEMBLY (HIGH-LONG, LH)
					1	D3272-042	STEP ASSEMBLY (HIGH-LONG, RH)
2	2	2	2	4	4	D2230-3	MOUNTING LUG
2	2	2	2	2	2	D2618	BUSHING
4	4	4	4			D2732-030	CUSHION
				2	2	D2856-400-720	ABRASION STRIP
2	2	2	2	2	2	D3235-1	MOUNTING LUG
				1	1	D3278-041	SUPPORT ASSEMBLY
2	2	2	2	2	2	AN3-35A	BOLT
				8	8	AN4-13A	BOLT
4	4	4	4			AN4-15A	BOLT
2	2	2	2	2	2	AN5-36A	BOLT
4	4	4	4	4	4	NAS1149D0363J	WASHER (AN960JD10)
12	12	12	12	16	16	NAS1149D0463J	WASHER (AN960JD416)
4	4	4	4	4	4	NAS1149D0563J	WASHER (AN960JD516)
2	2	2	2	2	2	MS21042L3	NUT
6	6	6	6	8	8	MS21042L4	NUT
2	2	2	2	2	2	MS21042L5	NUT
				1	1	*DSI 9410-011	STEP MODIFICATION KIT

*DSI 9410-011 Step Modification Kits are provided with all D350-591-311 and D350-591-312 Steps. This kit is provided as an option for the installer and is therefore **NOT REQUIRED** to complete the installation of the D350-591-311 or D350-591-312 Steps. Refer to Figure 15 for installation of the DSI 9410-011 Kit.

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS D350-591 REV. G AND
INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D350-591 REV. 3
REF TCCA STC: SH92-6
REF FAA STC: SH967NE

1.0 Purpose

It has come to DART's attention that it may be difficult to fasten the D350-591-133 Aft Maintenance Step and D350-591-213/-214 Heli-Access-Step Installations to the forward crosstube due to variations between crosstubes. For this reason, DART is adding the D3338-1 Mounting Lug to the D350-591-133 Aft Maintenance Step and D350-591-213/-214 Heli-Access-Step Kits at CHG 004 and later.

For D350-591-133 Aft Maintenance Step and D350-591-213/-214 Heli-Access-Step Kits at CHG 003 and earlier, DSI 9712-011 Mounting Lug Kit can be procured from DART. The kit contains all parts to upgrade a single step kit.

2.0 Installation

- 2.1 It is acceptable to install the D3338-1 Mounting Lug in lieu of the D2230-1 Mounting Lug as required to reduce the gap between step and the forward crosstube in accordance with the figures of this service instruction.
- 2.2 The height to set up the D350-591-133 Maintenance Step has been revised from 7.0in to 6.0in $\pm$ 1.0in to provide more flexibility. See sheet 2 of this service instruction.
- 2.3 In all other respects, install the D350-591-133 Aft Maintenance Step and D350-591-213/-214 Heli-Access-Steps in accordance with Section 3.1 of Installation Instructions D350-591 or Section 32.1 of Instructions for Continued Airworthiness ICA-D350-591.

3.0 Parts List Change

The following additional part is provided with D350-591-133 Aft Maintenance Step and D350-591-213/-214 Heli-Access-Steps at CHG 004:

Qty -133	Qty -213	Qty -214	Part Number	Description
X			D350-591-133	Heli-Access-Step™, Aft Maintenance Step
	X		D350-591-213	Heli-Access-Step™, Short Step – High Skid, LH
		X	D350-591-214	Heli-Access-Step™, Short Step – High Skid, RH
1	1	1	D3338-1	MOUNTING LUG (ADD)

4.0 DSI 9712-011 Mounting Lug Kit Parts List

For existing D350-591-133 Aft Maintenance Steps and D350-591-213/-214 Heli-Access-Steps at CHG 003 or earlier, one DSI 9712-011 kit upgrades one step installation:

Qty -011	Part Number	Description
X	DSI 9712-011	Mounting Lug Kit
1	D3338-1	MOUNTING LUG

5.0 Weight and Balance

There is a negligible weight change associated with this modification.

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: D. Shepherd
D. SHEPHERD (DE # 02)

DATE: 14.12.04
CERT. NO.: SH92-6
ISSUE NO.: 11

A	NEW ISSUE	MB	14.10.22
REV.	DESCRIPTION	BY	DATE
DESIGN	<u>JS</u>	DART AEROSPACE LTD	
DRAWN	<u>JS</u>	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<u>GP</u>	DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9712	SHEET 1 OF 3
APPROVED	<u>JS</u>	TITLE	SCALE
DE APPR.	<u>JS</u>	INSTALLATION OPTION	NTS
DATE	14.10.22	COPYRIGHT © 2014 BY DART AEROSPACE LTD	
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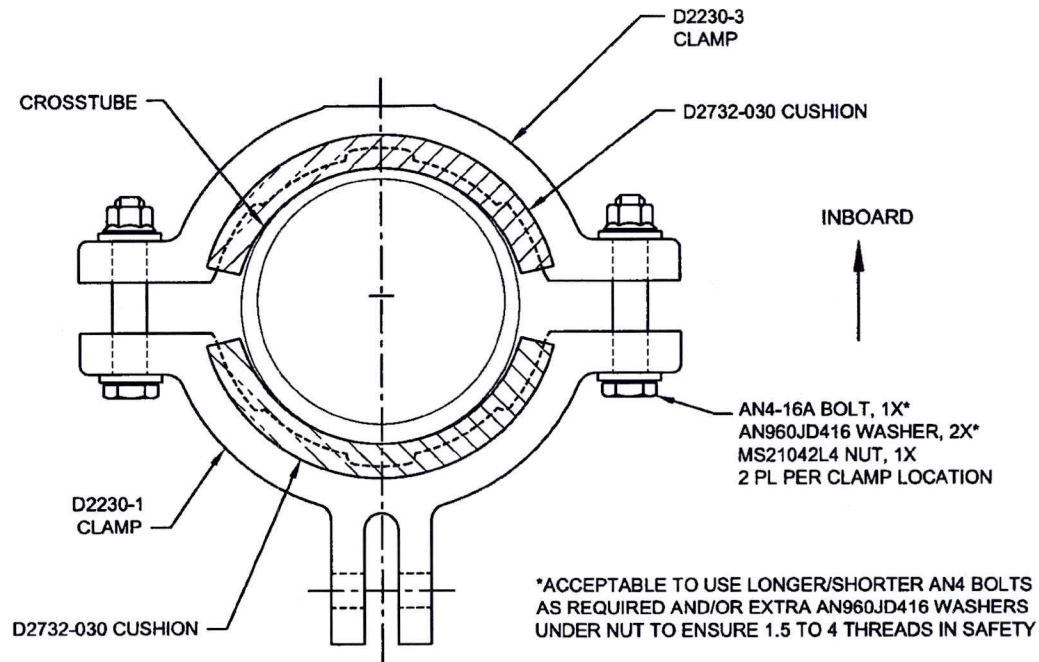


FIGURE 1: CLAMP DETAIL
OPTIONAL CLAMP CONFIGURATION

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED
BY: *[Signature]*
D. SHEPHERD (DE # 02)

DATE: 09.08.05
CERT. NO.: SH92-6
ISSUE NO.: 11

DESIGN	<i>qp</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	<i>qp</i>	DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9472	SHEET 2 OF 2
APPROVED	<i>[Signature]</i>	TITLE	SCALE
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DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS D350-591 REV. G OR EARLIER
AND
INSTRUCTIONS OF CONTINUED AIRWORTHINESS ICA-D350-591 REV. 2 OR EARLIER

REF CANADIAN STC: SH92-6

REF FAA STC: SH967NE

For D350-591-213/-214/-215/-216 steps, customers have the option of installing D2732-030 cushion under the clamps to accommodate varying crosstube diameters and to improve fit, as indicted in Installation Instructions D350-591. This Service Instruction adds longer AN4-16A bolts to the parts list to allow installation of these cushions. See Figure 1 on sheet 2 of this service instruction for reference. Installation of the D2856-400-720 Abrasion Strips per Installation Instructions D350-591 is not required when the cushions are installed.

For D350-591-213/-214/-215/-216 steps at CHG 003, the parts list of D350-591 Rev. G and ICA-D350-591 Rev. 2 is amended as follows:

ADD:

Qty -213	Qty -214	Qty -215	Qty -216	Part Number	Description
X				D350-591-213	<i>Heli-Access-Step</i> ™, Short Step – High Skid, LH
	X			D350-591-214	<i>Heli-Access-Step</i> ™, Short Step – High Skid, RH
		X		D350-591-215	<i>Heli-Access-Step</i> ™, Short Step – Low Skid, LH
			X	D350-591-216	<i>Heli-Access-Step</i> ™, Short Step – Low Skid, RH
4	4	4	4	AN4-16A	BOLT

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: 
D. SHEPHERD (DE # 02)

DATE: 09.08.05
CERT. NO.: SH92-6
ISSUE NO.: 11

A	NEW ISSUE	RF	09.08.05
REV.	DESCRIPTION	BY	DATE
DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF	DRAWING NO. REV. A DSI 9472 SHEET 1 OF 2	
CHECKED		SCALE	
MFG. APPR.	NDA	TITLE BOLT ADDITION NTS	
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DATE	09.08.05		

Change Record

PAGE 1 OF 1

Part Number: D350-591-213/-213GB/-214/-214GB

Description: HELI-ACCESS STEP, HIGH SKID, SHORT STEP, LH/RH

[illegible]